Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A mobile communication method for communication with a mobile communication apparatus when moving between a source access router apparatus and a destination access router apparatus, comprising:

determining, by the mobile communication apparatus, whether the source access router apparatus connected with the mobile communication apparatus complies with a Fast Mobile IP; and

selectively operating, by the mobile communication apparatus, between or among a plurality of operating modes based on at least the determined compliance of the source access router apparatus with the Fast Mobile IP,

in a first one of the operating modes, when the mobile communication apparatus determines that the source access router apparatus does not comply with the ~~a~~ Fast Mobile IP: the mobile communication apparatus requests information to a home agent apparatus on the destination access router apparatus, the home agent apparatus responds to the request, providing information on the destination access router apparatus to the mobile communication apparatus, and the mobile communication apparatus instructs the home agent apparatus to forward data addressed to the mobile communication apparatus to the destination access router apparatus, and

in a second one of the operating modes, when the mobile communication apparatus determines that the source access router apparatus complies with the Fast Mobile IP: the mobile communication apparatus sends information to the source access router apparatus for implementing a Fast Mobile IP procedure.

2. (Previously Presented) The mobile communication method according to claim 1, wherein the home agent apparatus stores information on access router apparatus and searches and gives information on the destination access router apparatus in accordance with the request by the mobile communication apparatus.

3. (Previously Presented) The mobile communication method according to claim 1, wherein the home agent apparatus makes inquiries about information on the destination access router apparatus to an access router information server apparatus storing information on access router apparatus, in accordance with the request by the mobile communication apparatus, and gives the information to the mobile communication apparatus.

4. (Previously Presented) The mobile communication method according to claim 1, wherein the mobile communication apparatus notifies the home agent apparatus of an identifier tag of the destination access router apparatus, and the home agent apparatus searches or inquires about information on the destination access router apparatus based on the identifier tag.

5. (Previously Presented) The mobile communication method according to claim 4, wherein the identifier tag of the destination access router is either a lower layer address or a cell station ID.

6. (Previously Presented) The mobile communication method according to claim 1, further comprising:

a step in which when the home agent apparatus could not acquire information on the destination access router apparatus, the home agent apparatus notifies the mobile communication apparatus accordingly.

7. (Currently Amended) A mobile communication method for communication with a mobile communication apparatus when moving between a source access router apparatus and a destination access router apparatus, comprising:

determining, by the a mobile communication apparatus, whether the source access router apparatus connected with the mobile communication apparatus is enabled to comply with a Fast Mobile IP;

selectively operating, by the mobile communication apparatus, between or among a plurality of operating modes based on at least the determined compliance of the source access router apparatus with the Fast Mobile IP;

in a first one of the operating modes, when the mobile communication apparatus determines that the source access router apparatus does not comply with the ~~:~~ Fast Mobile IP:

the mobile communication apparatus acquires information on the destination access router apparatus from an access router information server apparatus storing information on access router apparatus, and instructs a home agent apparatus to forward data addressed to the mobile communication apparatus to the destination access router apparatus, and

in a second one of the operating modes, when the mobile communication apparatus determines that the source access router apparatus complies with the Fast Mobile IP: the mobile communication apparatus sends information to the source access router apparatus for implementing a Fast Mobile IP procedure.

8. (Currently Amended) The mobile communication method according to claim 1, comprising:

when the mobile communication apparatus determines that the source access router apparatus does not comply with the Fast Mobile IP, and the destination access router apparatus complies with the Fast Mobile IP, instructing, by the mobile communication apparatus, the home agent apparatus to forward data addressed to the mobile communication apparatus to the destination access router apparatus;

establishing, by the home agent apparatus, a tunnel between the home agent apparatus and the destination access router apparatus and notifying the establishment thereof to the mobile communication apparatus; and

receiving, by the destination access router apparatus via the tunnel, data addressed to the mobile communication apparatus and forwarding the data to the mobile communication apparatus.

9. (Previously Presented) The mobile communication method according to claim 8, comprising:

when the mobile communication apparatus determines that the source access router apparatus complies with the Fast Mobile IP and the destination access router apparatus does not comply with the Fast Mobile IP, instructing, by the mobile communication apparatus, the source access router apparatus to forward data addressed to the mobile communication apparatus to the home agent apparatus;

establishing, by the source access router apparatus, a second tunnel between the source access router apparatus and the home agent apparatus and notifying the establishment thereof to the mobile communication apparatus; and

forwarding, by the home agent apparatus, data addressed to the mobile communication apparatus received via the second tunnel to the mobile communication apparatus.

10. (Previously Presented) The mobile communication method according to claim 9, wherein an instruction given by the mobile communication apparatus with respect to the source access router apparatus is one in which an address of the home agent apparatus is written in a new care-of address field of a fast binding update message according to a Fast Mobile IP procedure.

11. (Previously Presented) The mobile communication method according to claim 9, further comprising:

starting, by the home agent apparatus, buffering in a case that buffering is possible when the home agent apparatus receives an instruction from the source access router apparatus for buffering transmission data addressed to the mobile communication apparatus.

12. (Previously Presented) The mobile communication method according to claim 11, further comprising:

notifying, by the home agent apparatus, to start buffering to the source access router apparatus.

13. (Previously Presented) The mobile communication method according to claim 12, wherein in a case that the buffering is impossible, notifying, by the home agent apparatus, the source access router apparatus that buffering cannot be executed.

14. (Previously Presented) A mobile communication system comprising a network having plural sub-networks, access router apparatus connected to the sub-networks, a mobile communication apparatus making packet-communications with the network through the access router apparatus, a home agent apparatus connected to the network which implements mobile management of the mobile communication apparatus moving between the sub-networks, and at least one correspondent node connected to the network, which makes communication with the mobile communication apparatus, in which the access router apparatus which comply with a

Fast Mobile IP are intermixed with those which do not comply with the Fast Mobile IP, and the mobile communication apparatus, after moving to a different sub-network, makes a location registration to the home agent apparatus to continue the communication with the correspondent node,

wherein the mobile communication apparatus has a function of determining whether the access router apparatus complies with the Fast Mobile IP and selectively operates between or among a plurality of operating modes based on at least the determined compliance of a source access router apparatus with the Fast Mobile IP,

in a first one of the operating modes, if the source access router apparatus is determined to comply with the Fast Mobile IP, the mobile communication apparatus sends to the source access router apparatus to implement a Fast Mobile IP procedure, and

in a second one of the operating modes, if the mobile communication apparatus determines that the source access router apparatus does not comply with the Fast Mobile IP, the mobile communication apparatus requests information to the home agent apparatus on the destination access router apparatus, the home agent apparatus provides the information on the destination access router apparatus to the mobile communication apparatus in response to a request, and the mobile communication apparatus instructs the home agent apparatus to forward data addressed to the mobile communication apparatus to the destination access router apparatus.

15. (Previously Presented) A mobile communication system comprising a network having plural sub-networks, access router apparatus connecting to the sub-networks, a mobile communication apparatus making packet-communications with the network through the access router apparatus, a home agent apparatus connected to the network which implements mobile management of the mobile communication apparatus moving between the sub-networks, at least one correspondent node connecting to the network and which performs communications with the mobile communication apparatus, and an access router information server apparatus storing information on the access router apparatus, including the access router apparatus which comply with a Fast Mobile IP that are intermixed with other access router apparatus which do not comply with the Fast Mobile IP, and the mobile communication apparatus, after moving to a different sub-network, makes a location registration to the home agent apparatus to continue the communications with the correspondent node,

wherein the mobile communication apparatus has a function of determining whether the access router apparatus comply with the Fast Mobile IP and selectively operates between or among a plurality of operating modes based on at least the determined compliance of a source access router apparatus with the Fast Mobile IP,

in a first one of the operating modes, if the source access router complies with the Fast Mobile IP, the mobile communication apparatus sends to the source access router apparatus to implement a Fast Mobile IP procedure, and

in a second one of the operating modes, if the source access router apparatus does not comply with the Fast Mobile IP, the mobile communication apparatus acquires information on the destination access router apparatus from the access router information server apparatus and instructs the home agent apparatus to forward data addressed to the mobile communication apparatus to the destination access router apparatus.

16. (Currently Amended) A mobile communication apparatus, comprising:

a mobile IP/Fast Mobile IP processing part for implementing a standard Mobile IP processing and a Fast Mobile IP processing;

an access router searching part for acquiring information on access router apparatus from the mobile IP/Fast Mobile IP processing part;

a Fast Mobile IP compliance determining part for determining whether an access router apparatus complies with a Fast Mobile IP based on the information acquired at the access router searching part; and

a Fast Mobile IP control part for selectively operating between or among a plurality of operating modes based on at least the determined compliance of the access router apparatus with the Fast Mobile IP and controlling contents of a message generated by the mobile IP/Fast Mobile IP processing part based on a result of an operation of the Fast Mobile IP compliance determining part such that in a first one of the operating modes, when the mobile communication apparatus determines that the source access router apparatus complies with the Fast Mobile IP; the mobile communication apparatus sends the message to the access router apparatus to implement a Fast Mobile IP procedure and in a second one of the operating modes, when the mobile communication apparatus determines that the source access router apparatus

does not comply with the Fast Mobile IP: the mobile communication apparatus sends the message to a home agent apparatus which responds to the message and provides information on a destination access router apparatus to the mobile communication apparatus, and the mobile communication apparatus instructs the home agent apparatus to forward data addressed to the mobile communication apparatus to the destination access router apparatus.

17. (Previously Presented) The mobile communication apparatus according to claim 16, wherein information on the access router apparatus is acquired from the home agent apparatus which manages movements of the mobile communication apparatus between sub-networks or from the access router apparatus.

18. (Currently Amended) The mobile communication apparatus according to claim 16, wherein if the Fast Mobile IP compliance determining part determines that the access router apparatus does not comply with the Fast Mobile IP, the Fast Mobile IP control part gives identifying information of the destination access router apparatus to the home agent apparatus or an access router information server apparatus and controls the mobile IP/Fast Mobile IP processing part so as to request information on the destination access router.

19. (Previously Presented) The mobile communication apparatus according to claim 18, wherein when the Fast Mobile IP compliance determining part determines that the destination access router apparatus complies with the Fast Mobile IP based on the information on the destination access router apparatus obtained from the home agent apparatus, the Fast Mobile IP control part controls the Mobile IP/Fast Mobile IP processing part so that the home agent apparatus forwards data addressed to the mobile communication apparatus to the destination access router apparatus.

20. (Previously Presented) The mobile communication apparatus according to claim 16, wherein when the Fast Mobile IP compliance determining part determines that the access router apparatus complies with the Fast Mobile IP and a destination access router does not comply with the Fast Mobile IP, the Fast Mobile IP control part controls the Mobile IP/Fast Mobile IP processing part so that the access router apparatus forwards data addressed to the mobile communication apparatus to the home agent apparatus.

21. (Previously Presented) The mobile communication apparatus according to claim 16, wherein the Mobile IP/Fast Mobile IP processing part sends a message in which an address

of the home agent apparatus is written in a new care-of address field of a fast binding update message according to a Fast Mobile IP procedure to the access router apparatus.

22. (Currently Amended) A home agent apparatus used with a source access router apparatus and a mobile communication apparatus, the mobile communication apparatus selectively operating in one of a plurality of operating modes, in a first one of the operating modes, when the mobile communication apparatus determines that the source access router apparatus complies with a Fast Mobile IP: the mobile communication apparatus sends a message to the source access router apparatus to implement a Fast Mobile IP procedure, comprising:

a mobile IP/Fast Mobile IP processing part for implementing a standard Mobile IP processing and a Fast Mobile IP processing;

a buffer memory, when the mobile communication apparatus is operating in a second one of the operating modes in which the source access router apparatus is determined by mobile communication apparatus ~~does~~to not comply with the Fast Mobile IP, temporarily stores data addressed to the mobile communication apparatus of a management target; and

a buffer management part, managing input and output to and from the buffer memory when the buffer management part receives a request, indicating that the mobile communication apparatus is operating in the second one of the operating modes, for the storing of data to be sent to the mobile communication apparatus which is received by the mobile IP/Fast Mobile IP processing part or a request for a transmission of the stored data.

23. (Previously Presented) The home agent apparatus according to claim 22, wherein the buffer management part starts to buffer data when the buffer management part receives a message requesting to start buffering from the source access router apparatus, and transmits the buffered data to the mobile communication apparatus to which the data is addressed when the buffer management part receives a message requesting to start a transmission of the buffered data from a destination access router apparatus.

24. (Previously Presented) The home agent apparatus according to claim 22, further comprising:

a destination access router searching part for requesting an access router information server apparatus which stores information on access router apparatus for information on a destination access router apparatus in response to an inquiry of information on the destination access router apparatus, and giving a requesting device the requested information.

25. (Previously Presented) The home agent apparatus according to claim 24, wherein the destination access router searching part makes a request to the access router information server apparatus based on an identifier tag of the destination access router apparatus acquired when the destination access router searching part receives the request from the mobile communication apparatus.

26. (Previously Presented) The home agent apparatus according to claim 24, further comprising:

an access router information list in which identifier tags of the access router apparatus, IP addresses of the access router apparatus, and a compliance/noncompliance with the Fast Mobile IP of the access router apparatus are written; and

an access router information searching part for searching for entries corresponding to a respective identifier tag included in the received message requesting information on the access router apparatus, and

wherein the destination access router searching part instructs the access router information searching part to search for information on the destination access router apparatus in response to the request.

27. (Previously Presented) The home agent apparatus according to claim 26, wherein the respective identifier tag of the access router apparatus is either a lower layer address or a cell station ID.

28. (Currently Amended) An access router information server apparatus used with a mobile communication apparatus and source and destination access router apparatus such that when the mobile communication apparatus operates in a first operating mode, in which the source access router apparatus is determined by the mobile communication apparatus to comply with the Fast Mobile IP: the mobile communication apparatus sends information to the

source access router apparatus for implementing a Fast Mobile IP procedure, the access router information server apparatus comprising:

an access router information list in which identifier tags of access router apparatus, IP addresses of the access router apparatus and a compliance/noncompliance with ~~a~~ the Fast Mobile IP of the access router apparatus are written;

a receiving part for receiving requests for information on the access router apparatus from kinds of apparatus on a network;

an access router information searching part, when the mobile communication apparatus is operating in a second operating mode in which~~indicating that~~ the source access router apparatus is determined by the mobile communication apparatus ~~does~~to not comply with ~~a~~ the Fast Mobile IP, searching the access router information list for entries corresponding to a respective identifier tag included in the received request; and:

an access router information notifying part for notifying the mobile communication apparatus of a search result.

29. (Previously Presented) The access router information server apparatus according to claim 28, wherein the respective identifier tag of the access router is either a lower layer address or a cell station ID.

30. (Previously Presented) The mobile communication method according to claim 8, comprising:

if the mobile communication apparatus determines that the destination access router apparatus does not comply with the Fast Mobile IP, instructing, by the mobile communication apparatus, the source access router apparatus to forward data addressed to the mobile communication apparatus to the home agent apparatus;

forwarding, by the home agent apparatus, the data addressed to the mobile communication apparatus which is received from the source access router apparatus to a buffer node which stores data temporarily;

when the home agent apparatus receives notification of a completion of a handover from the mobile communication apparatus, instructing the buffer node to transmit data addressed to the mobile communication apparatus to the mobile communication apparatus; and

when the buffer node receives an instruction for transmission, transmitting, by the buffer node, the stored data addressed to the mobile communication apparatus to the mobile communication apparatus indicated in the instruction.

31. (Previously Presented) The mobile communication method according to claim 30, further comprising:

when the home agent apparatus receives a buffer request message from the source access router apparatus, transmitting, by the home agent apparatus, a request for storing data to the buffer node; and

sending, by the buffer node, a response answering whether the buffer node is enabled to store data to the home agent apparatus when the buffer node receives the buffer request message.

32. (Original) The mobile communication method according to claim 30, wherein a tunnel is established in the data transmission between the home agent apparatus and the buffer node or the data transmission between the buffer node and the mobile communication apparatus or both.

33. (Currently Amended) The mobile communication system according to claim 14, further comprising:

a buffer node for temporarily storing data,

wherein the home agent apparatus instructs the temporary storing of data transmitted to the buffer node and the transmission of that data to the designated mobile communication apparatus, and the buffering node stores received data and later forwards the data to ~~the~~ a designated mobile communication apparatus.

34. (Currently Amended) A home agent apparatus used with a source access router apparatus and a mobile communication apparatus, the mobile communication apparatus selectively operating in one of a plurality of operating modes, in a first one of the operating

modes, when the mobile communication apparatus determines that the source access router apparatus complies with the Fast Mobile IP: the mobile communication apparatus sends a message to the source access router apparatus to implement a Fast Mobile IP procedure, comprising:

a mobile IP/Fast Mobile IP processing part for implementing a standard Mobile IP processing and a Fast Mobile IP processing;

a data forwarding part for forwarding data addressed to a mobile communication apparatus being managed that has been received by the mobile IP/Fast Mobile IP processing part, when a request is received indicating that the mobile communication apparatus is operating in a second one of the operating modes in which the source access router is determined by the mobile communication apparatus ~~does~~ not to comply with a Fast Mobile IP, to an external storage apparatus; and

a message generating part for generating a message which instructs the storing of data addressed to the mobile communication apparatus that has been forwarded by the data forwarding part and a message which instructs the transmission of the data stored in the external storage apparatus to the mobile communication apparatus, and for requesting the mobile IP/Fast Mobile IP processing part to send the message to the external storage apparatus.